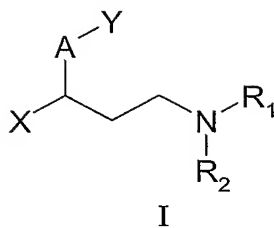


We Claim:

1. A compound of formula I:

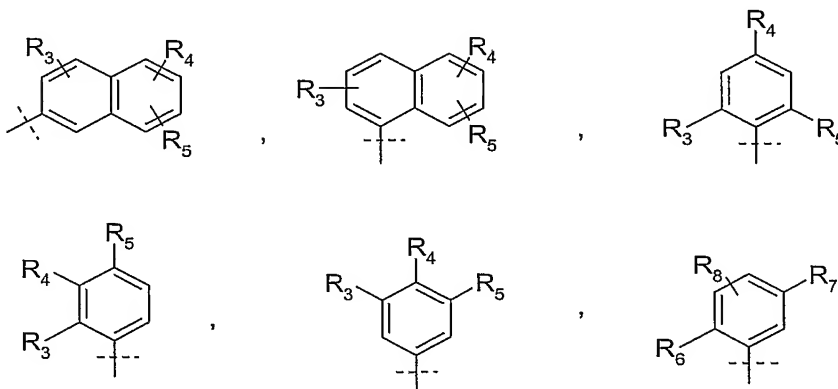


wherein

A is selected from -O- and -S-;

X is selected from C<sub>1</sub>-C<sub>8</sub> alkyl, C<sub>2</sub>-C<sub>8</sub> alkenyl, and C<sub>4</sub>-C<sub>8</sub> cycloalkylalkyl, each of which may be optionally substituted with up to 3 substituents each independently selected from phenyl, pyrrolidinyl, piperidinyl, morpholinyl, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>- where n is 0, 1 or 2, -CF<sub>3</sub>, -CN and -CONH<sub>2</sub>;

Y is selected from



wherein

R<sub>3</sub>, R<sub>4</sub> and R<sub>5</sub> are independently selected from hydrogen, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>- where n is 0, 1 or 2, nitro, acetyl, -CF<sub>3</sub>, -SCF<sub>3</sub> and cyano;

R<sub>6</sub> and R<sub>7</sub> are independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>- where n is 0, 1 or 2, nitro, acetyl, -CF<sub>3</sub>, -SCF<sub>3</sub> and cyano;

5 R<sub>8</sub> is selected from chloro, bromo, iodo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>- where n is 0, 1 or 2, nitro, acetyl, -CF<sub>3</sub>, -SCF<sub>3</sub> and cyano; and

R<sub>1</sub> and R<sub>2</sub> are each independently hydrogen or C<sub>1</sub>-C<sub>4</sub> alkyl;

10 or pharmaceutically acceptable salts thereof.

2. A compound as claimed in claim 1, wherein A is -O-.

3. A compound as claimed in claim 1, wherein A is -S-.

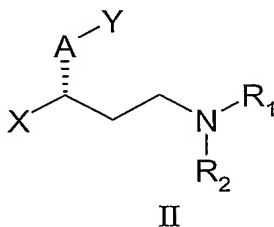
15

4. A compound as claimed in any one of the preceding claims, wherein one of R<sub>1</sub> and R<sub>2</sub> is hydrogen.

20

5. A compounds as claimed in any one of the preceding claims, wherein one of R<sub>1</sub> and R<sub>2</sub> is hydrogen and the other is methyl.

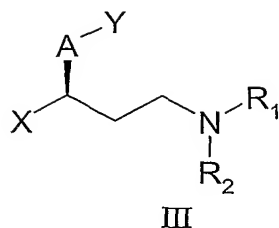
6. A compound as claimed in any one of the preceding claims, wherein the compound possesses the stereochemistry defined in formula II



25

7. A compound as claimed in any one of claims 1 - 5, wherein the compound possesses the stereochemistry defined in formula III

-82-



8. A compound as claimed in any one of the preceding claims, wherein X is C<sub>1</sub>-C<sub>8</sub> alkyl which may be optionally substituted with one substituent independently selected from phenyl, pyrrolidinyl, morpholinyl, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>- where n is 0, 1 or 2, and -CF<sub>3</sub>.

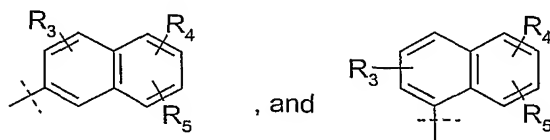
9. A compound as claimed in claim 8 wherein X is selected from methyl, ethyl, n-propyl, i-propyl, n-butyl, i-butyl, n-pentyl, i-pentyl, neopentyl, 3,3-dimethylbutyl and 2-ethylbutyl, each of which may be optionally substituted with one substituent independently selected from phenyl, pyrrolidinyl, morpholinyl, halo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>-where n is 0 and -CF<sub>3</sub>.

10. A compound as claimed in claim 9 wherein X is selected from n-propyl, i-propyl, n-butyl and i-butyl.

11. A compound as claimed in any one of claims 1 to 7, wherein X is C<sub>4</sub>-C<sub>8</sub> cycloalkylalkyl which may be optionally substituted with up to 3 substituents each independently selected from halo, C<sub>1</sub>-C<sub>4</sub> alkyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkyl-S(O)<sub>n</sub>- where n is 0, 1 or 2, -CF<sub>3</sub>, -CN and -CONH<sub>2</sub>.

12. A compound as claimed in claim 11 wherein X is selected from cyclohexylmethyl and cyclopropylmethyl.

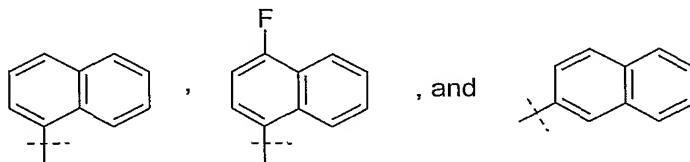
13. A compound as claimed in any one of claims 1 to 12, wherein Y is selected from



where

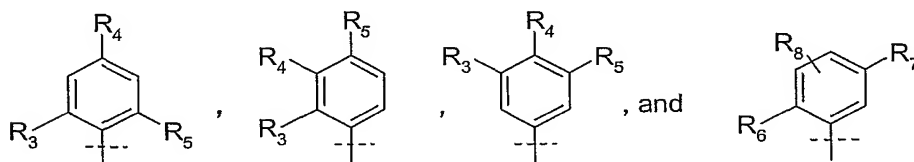
$R_3$ ,  $R_4$  and  $R_5$  are independently selected from hydrogen, halo,  $C_1$ - $C_4$  alkyl and  $-CF_3$ .

14. A compound as claimed in claim 13, wherein Y is selected from



5

15. A compound as claimed in any one of claims 1 to 12, wherein Y is selected from



10

wherein

$R_3$ ,  $R_4$  and  $R_5$  are independently selected from hydrogen, halo,  $C_1$ - $C_4$  alkyl, and  $-CF_3$ ;

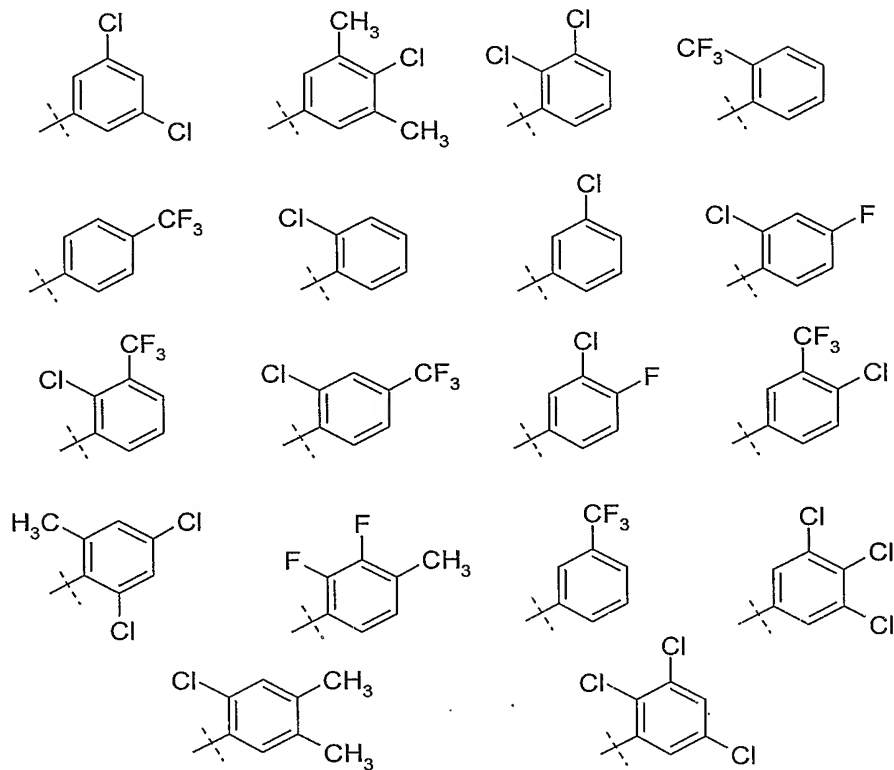
$R_6$  and  $R_7$  are independently selected from halo,  $C_1$ - $C_4$  alkyl, and  $-CF_3$ ; and

$R_8$  is selected from chloro, bromo, iodo,  $C_1$ - $C_4$  alkyl, and  $-CF_3$ ;

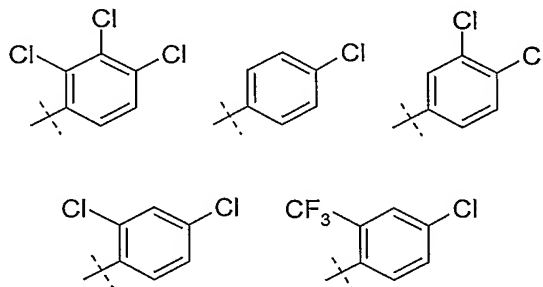
provided when  $R_3$  and  $R_4$  are hydrogen,  $R_5$  is not hydrogen.

15

16. A compound as claimed in claim 15, wherein Y is selected from



- 5 17. A compound as claimed in claim 15, wherein Y is selected from



18. A compound as claimed in claim 16 or 17 wherein X is n-propyl.

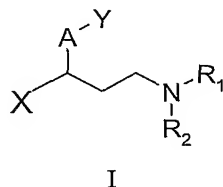
- 10 19. A compound of claim 1 selected from  
(S)-Methyl-[3-(2-trifluoromethyl-phenoxy)-hexyl]-amine;  
(S)-[3-(3-Chloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(3-Chloro-4-fluoro-phenoxy)-hexyl]-methyl-amine;

- (S)-[3-(4-Chloro-3-trifluoromethyl-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(2-Chloro-4-fluoro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(2-Chloro-4-trifluoromethyl-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(4-Fluoro-naphthalen-1-yloxy)-hexyl]-methyl-amine;  
5 (S)-[3-(2,3-Difluoro-4-methyl-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(4-Fluoro-naphthalen-1-yloxy)-hexyl]-methyl-amine;  
[3-(2,4-Dichloro-phenoxy)-4-methyl-pentyl]-methyl-amine ;  
[3-(2,4-Dichloro-phenoxy)-5,5-dimethyl-hexyl]-methyl-amine;  
[4-Cyclopropyl-3-(2,4-dichloro-phenoxy)-butyl]-methyl-amine;  
10 (S)-Methyl-[3-(4-trifluoromethyl-phenoxy)-hexyl]-amine;  
(S)-[3-(4-Chloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(2,3-Dichloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(Naphthalen-2-yloxy)-hexyl]-methyl-amine;  
(S)-[3-(Naphthalen-1-yloxy)-hexyl]-methyl-amine;  
15 (S)-[3-(2-Chloro-3-trifluoromethyl-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(2,3,5-Trichloro-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(4-Chloro-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(2,3-Dichloro-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(Naphthalen-2-yloxy)-hexyl]-methyl-amine;  
20 (R)-[3-(Naphthalen-1-yloxy)-hexyl]-methyl-amine;  
(R)-[3-(2-Chloro-3-trifluoromethyl-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(2,3,5-Trichloro-phenoxy)-hexyl]-methyl-amine;  
[3-(2,4-Dichloro-phenoxy)-butyl]-methyl-amine;  
[3-(2,4-Dichloro-phenoxy)-pentyl]-methyl-amine;  
25 (S)-[3-(2,4-Dichloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(3,4-Dichloro-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(3,4-Dichloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(3,5-Dichloro-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(3,5-Dichloro-phenoxy)-hexyl]-methyl-amine;  
30 (S)-[3-(2,4-Dichloro-6-methyl-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(4-Chloro-3,5-dimethyl-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(4-Chloro-3,5-dimethyl-phenoxy)-hexyl]-methyl-amine;  
[3-(2,4-Dichloro-phenoxy)-6-methyl-heptyl]-methyl-amine;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-methoxy-butyl]-methyl-amine;  
35 (R)-[3-(2,4-Dichloro-phenoxy)-4-ethoxy-butyl]-methyl-amine;

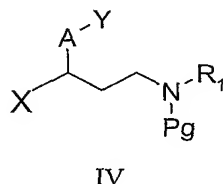
- [3-(2,3-Dichloro-phenoxy)-6-methyl-heptyl]-methyl-amine;  
(S)-[3-(4-Chloro-2-trifluoromethyl-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-isobutoxy-butyl]-methyl-amine;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-isopropoxy-butyl]-methyl-amine;  
5 (R)-[3-(2,4-Dichloro-phenoxy)-4-isopropylsulfanyl-butyl]-methyl-amine;  
(R)-[4-tert-Butoxy-3-(2,4-dichloro-phenoxy)-butyl]-methyl-amine;  
(S)-[4-tert-butoxy-3-(2,4-dichloro-phenoxy)-butyl]-methyl-amine;  
(R)-[3-(2,3,4-trichloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(2,3,4-trichloro-phenoxy)-hexyl]-methyl-amine;  
10 (R)-[3-(3,4,5-trichloro-phenoxy)-hexyl]-methyl-amine;  
(S)-[3-(3,4,5-trichloro-phenoxy)-hexyl]-methyl-amine;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-morpholin-4-yl-butyl]-methyl-amine;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-pyrrolidin-1-yl-butyl]-methyl-amine;  
(S)-[3-(3-Chloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
15 (S)-[3-(3-Chloro-4-fluoro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(4-Chloro-3-trifluoromethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2-Chloro-4-fluoro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2-Chloro-4-trifluoromethyl-phenoxy)-hexyl]-methyl amine hydrochloride;  
(S)-[3-(4-Fluoro-naphthalen-1-yloxy)-hexyl]-methyl-amine hydrochloride;  
20 (S)-[3-(2,3-Difluoro-4-methyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(4-Fluoro-naphthalen-1-yloxy)-hexyl]-methyl-amine hydrochloride;  
[3-(2,4-Dichloro-phenoxy)-6,6,6-trifluoro-hexyl]-methyl-amine hydrochloride;  
[3-(2,4-Dichloro-phenoxy)-4-methyl-pentyl]-methyl-amine hydrochloride;  
[3-(2,4-Dichloro-phenoxy)-5,5-dimethyl-hexyl]-methyl-amine hydrochloride;  
25 [4-Cyclopropyl-3-(2,4-dichloro-phenoxy)-butyl]-methyl-amine hydrochloride;  
(R)-[3-(2,3,4)-Trichloro -phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(3,4,5)-Trichloro -phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2,3,4)-Trichloro -phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(3,4,5)-Trichloro -phenoxy)-hexyl]-methyl-amine hydrochloride;  
30 (S)-[3-(2-Trifluoromethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(4-Trifluoromethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2-Chloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(4-Chloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2,3-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
35 (S)-[3-(Naphthalen-2-yloxy)-hexyl]-methyl-amine hydrochloride;

- (S)-[3-(Naphthalen-1-yloxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2-Chloro-3-trifluoromethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2,3,5-Trichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(4-Chloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
5 (R)-[3-(2,3-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(Naphthalen-2-yloxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(Naphthalen-1-yloxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(2-Chloro-3-trifluoromethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(2,3,5-Trichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
10 [3-(2,4-Dichloro-phenoxy)-butyl]-methyl-amine hydrochloride;  
[3-(2,4-Dichloro-phenoxy)-pentyl]-methyl-amine hydrochloride;  
(S)-[3-(2,4-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(3,4-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(3,4-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
15 (S)-[3-(3,5-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(3,5-Dichloro-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(2,4-Dichloro-6-methyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(S)-[3-(4-Chloro-3,5-dimethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(4-Chloro-3,5-dimethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
20 [3-(2,4-Dichloro-phenoxy)-6-methyl-heptyl]-methyl-amine hydrochloride;  
[3-(2,3-Dichloro-phenoxy)-6-methyl-heptyl]-methyl-amine hydrochloride;  
[3-(2,3-Dichloro-phenoxy)-6-methyl-heptyl]-methyl-amine hydrochloride;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-isobutoxy-butyl]-methyl-amine hydrochloride;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-isopropoxy-butyl]-methyl-amine hydrochloride;  
25 (R)-[3-(2,4-Dichloro-phenoxy)-4-isopropylsulfanyl-butyl]-methyl-amine hydrochloride;  
(S)-[3-(4-Chloro-2-trifluoromethyl-phenoxy)-hexyl]-methyl-amine hydrochloride;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-methoxy-butyl]-methyl-amine hydrochloride;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-ethoxy-butyl]-methyl-amine hydrochloride;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-isopropoxy-butyl]-methyl-amine hydrochloride;  
30 (R)-[3-(2,4-Dichloro-phenoxy)-4-pyrrolidin-1-yl-butyl]-methyl-amine succinate;  
(R)-[3-(2,4-Dichloro-phenoxy)-4-morpholine-4-yl-butyl]-methyl-amine succinate;  
(R)-[4-*tert*-Butoxy-3-(2,4-dichloro-phenoxy)-butyl]-methyl-amine trifluoroacetate; and  
(S)-[4-*tert*-Butoxy-3-(2,4-dichloro-phenoxy)-butyl]-methyl-amine trifluoroacetate.

20. A process for preparing the compound of formula I, or a pharmaceutically acceptable salt thereof, comprising



5 for a compound of formula I where  $R_2$  is hydrogen, deprotecting a compound of formula IV



10 where Pg is an amine protecting group;

whereafter, for the above procedure, when a pharmaceutically acceptable salt of a compound of formula I is required, it is obtained by reacting the basic form of such a compound of formula I with an acid affording a physiologically acceptable counterion, or by any other  
15 conventional procedure where the values of X, A, Y,  $R_1$  and  $R_2$  are defined in claim 1.

21. A pharmaceutical composition comprising a compound of formula I or a pharmaceutically acceptable salt thereof, as defined in any one of claims 1-19, together with a pharmaceutically acceptable diluent or carrier.

22. A compound of formula I or a pharmaceutically acceptable salt thereof, as defined in any one of claims 1-19, for use as a pharmaceutical.

23. A compound of formula I or a pharmaceutically acceptable salt thereof, as defined in any one of claims 1-19, for use as a selective inhibitor of the reuptake of both serotonin and norepinephrine.

24. A compound of formula I or a pharmaceutically acceptable salt thereof, as

defined in any one of claims 1-19, for use in the treatment of a disorder associated with serotonin and norepinephrine dysfunction in mammals.

25. A compound of formula I or a pharmaceutically acceptable salt thereof, as  
5 defined in any one of claims 1-19, for use in the treatment of a disorder selected from selected from depression, OCD, anxiety, memory loss, urinary incontinence, conduct disorders, ADHD, obesity, alcoholism, smoking cessation, hot flashes/flushes and pain.

26. The use of a compound of formula I or a pharmaceutically acceptable salt  
10 thereof, as defined in any one of claims 1-19, in the manufacture of a medicament for selectively inhibiting the reuptake of serotonin and norepinephrine.

27. The use of a compound of formula I or a pharmaceutically acceptable salt thereof, as  
15 defined in any one of claims 1-19, in the manufacture of a medicament for the treatment of a disorder associated with serotonin and norepinephrine dysfunction in mammals.

28. The use as claimed in claim 27, wherein the disorder is selected from depression, OCD,  
anxiety, memory loss, urinary incontinence, conduct disorders, ADHD, obesity, alcoholism,  
smoking cessation, hot flashes/flushes and pain.

29. The use as claimed in claim 28, wherein the disorder is selected from depression, urinary  
incontinence and pain.

30. The use as claimed in claim 29, wherein the disorder is pain.

31. A method for selectively inhibiting the reuptake of serotonin and norepinephrine in  
mammals, comprising administering to a mammal patient in need thereof an effective amount of a  
compound of formula I or a pharmaceutically acceptable salt thereof, as defined in any one of  
claims 1-19.

32. A method as claimed in claim 31, where the mammal is human.